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United States Patent [19]**Griffith**[11] **Patent Number:** **5,158,883**[45] **Date of Patent:** **Oct. 27, 1992**

[54] **METHOD OF USING AMINOARGININE TO BLOCK NITRIC OXIDE FORMATION IN VITRO**

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Related U.S. Application Data

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[51] Int. Cl.⁵ **C12N 5/06**

[52] U.S. Cl. **435/240.2; 435/114; 514/565**

[58] Field of Search **435/240.2, 240.3, 240.31, 435/114; 514/565**

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[57] **ABSTRACT**

Pharmaceutically pure physiologically active NG-aminoarginine (i.e., the L or D,L form) or pharmaceutically acceptable salt thereof is administered in a nitric oxide synthesis inhibiting amount to a subject in need of such inhibition (e.g. a subject with low blood pressure or needing immunosuppressive effect) or is added to a medium containing isolated organs, intact cells, cell homogenates or tissue homogenates in an amount sufficient to inhibit nitric oxide formation to elucidate or control the biosynthesis, metabolism or physiological role of nitric oxide.

NG-amino-L-arginine is prepared and isolated as a pharmaceutically pure compound by reducing NG-nitro-L-arginine, converting L-arginine by-product to L-ornithine with arginase and separating NG-amino-L-arginine from the L-ornithine. NG-amino-D,L-arginine is prepared in similar fashion starting with NG-nitro-D,L-arginine.

1 Claim, No Drawings